#### REMARKS

#### I. General

Claims 1-37 were pending in the present application, and all of claims 1-37 are rejected in the current Office Action (mailed July 13, 2007). The current Office Action raises the following issues:

- Claims 1-15 are rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter;
- Claims 1-9, 11-15, and 25-37 are rejected under 35 U.S.C. § 102(e) as being anticipated by US. Patent No. 6,516,350 to Lumelsky et al. (hereinafter "Lumelsky");
- Claims 16-24 are rejected under 35 U.S.C. §103(a) as being unpatentable over Lumelsky;
- Claim 10 is rejected under 35 U.S.C. §103(a) as being unpatentable over Lumelsky in view of U.S. Patent No. 5,778,683 to Drees (hereinafter "Drees"); and
- Claim 36 is rejected under 35 U.S.C. §103(a) as being unpatentable over Lumelsky in view of U.S. Patent No. 6,389,510 to Chen (hereinafter "Chen").

In response, Applicant respectfully traverses the outstanding objections and claim rejections, and requests reconsideration and withdrawal thereof in light of the amendments and remarks presented herein.

#### II. Amendment to the Claims

Claim I is amended herein to recite that the configuration information comprises "a single file benchmark and a unique file benchmark for the at least one streaming media server", and to recite that the evaluating performed by the capacity planning tool is "based on said configuration information". No new matter is presented by this amendment, see e.g., paragraphs 0037-0041 of the specification.

Claim 10 is amended herein to be rewritten in independent form. Claim 10 is not narrowed in any way from its original scope, but is instead merely rewritten in independent form to include the elements of claims 1 and 9 from which it depended.

Claim 16 is amended to recite "code for employing a cost function derived for at least one system configuration from a single file benchmark and a unique file benchmark for evaluating a capacity of the at least one system configuration for supporting the workload" (newly added language shown underlined). No new matter is presented by this amendment, see e.g., paragraphs 0037-0048 of the specification.

Claim 25 is amended to recite that the configuration information comprises "for each of the plurality of different system configurations, a corresponding single file benchmark and unique file benchmark, wherein said single file benchmark measures capacity of the corresponding system configuration for serving a population of clients that all access a same file, wherein said unique file benchmark measures capacity of the corresponding system configuration for serving a population of clients that all access different files". Claim 25 is also amended to recite that the evaluating is "based on the configuration information". No new matter is presented by this amendment, see e.g., paragraphs 0037-0041 of the specification.

Claim 28 is amended to recite that the workload information identifies an expected workload of client accesses of streaming media files from a server "over a period of time", and claim 28 is amended to recite that the service demand profile comprises "a plurality of pairs of information, each pair comprising an identification of a duration of time in said period of time and a corresponding computed resource cost of the at least one server configuration for serving the workload over the duration of time." No new matter is presented by this amendment, see e.g., paragraphs 0058-0060 of the specification.

Claim 32 is amended herein to include the element of dependent claim 36, which originally depended from claim 32. As such, the amendment to claim 32 effectively rewrites dependent claim 36 in independent form as claim 32. Accordingly, claim 36 is canceled without prejudice.

New claims 38-44 are presented herein. No new matter is added by these new claims as support for their subject matter can be found throughout the specification and claims as originally filed.

#### III. Rejection under 35 U.S.C. § 101

Claims 1-15 are rejected under 35 U.S.C. § 101 as directed to non-statutory subject matter. Applicant respectfully traverses this rejection.

Independent claim 1, as amended herein, recites:

A method comprising:

receiving, into a capacity planning tool, configuration information for at least one streaming media server, wherein the configuration information comprises a single file benchmark and a unique file benchmark for the at least one streaming media server:

receiving, into said capacity planning tool, workload information for a workload of client accesses of streaming media files from a server; and said capacity planning tool evaluating, based on said configuration information, a capacity of the at least one streaming media server for supporting the workload.

In rejecting claims 1-15, the Office Action merely asserts that "there is no possibility that the capacity planning tool can be implemented; it is computer code per se." Page 2 of the Office Action. However, claim 1 is not directed to a computer program. Rather, claim 1 recites a method, which involves receiving configuration information by a capacity planning tool, receiving workload information by the capacity planning tool, and evaluating the capacity of at least one streaming media server by the capacity planning tool. Thus, claim 1 clearly falls within an enumerated statutory category of 35 U.S.C. § 101, i.e., a method. See M.P.E.P. § 2106(IV)(B).

As such, even if the recited capacity planning tool encompassed software per se, claim 1 is not directed to such software but is instead directed to the statutorily-recognized subject matter of a "method". Further, claim 1 does not recite that the capacity planning tool is software. That is, the capacity planning tool of claim 1 need not be limited to software per se. Indeed, the Examiner offers no reasoning for such interpretation of the recited capacity planning tool as

being software per se. The present application describes, for instance, that to the extent that the recited capacity planning tool may be implemented as software, such software may be stored in a computer readable medium, see e.g., paragraphs 0069-0075 of the present application. Thus, when properly interpreted in light of and consistent with the written description in the application, there is no basis to interpret the recited capacity planning tool in a manner that renders claim 1 non-statutory under 35 U.S.C. §101.

Accordingly, the rejection of claims 1-15 under 35 U.S.C. §101 should be withdrawn.

# IV. Rejection under 35 U.S.C. § 102(e) as anticipated by Lumelsky

Claims 1-9, 11-15, and 25-37 are rejected under 35 U.S.C. § 102(e) as being anticipated by Lumelsky. In order to anticipate a claim under 35 U.S.C. § 102, a single reference must teach each and every element of the claim. Verdegaal Bros. v. Union Oil Co. of California, 814 F.2d 628, 631 (Fed. Cir. 1987). In fact, "[t]he identical invention must be shown in as complete detail as is contained in the . . . claim." Richardson v. Suzuki Motor Co., 868 F.2d 1226, 1236 (Fed. Cir. 1989). Applicant respectfully submits that, for the reasons discussed below, Lumelsky fails to teach all elements of claims 1-9, 11-15, and 25-37, and therefore fails to anticipate those claims.

#### Independent Claim 1

Independent claim 1, as amended herein, recites:

#### A method comprising:

receiving, into a capacity planning tool, configuration information for at least one streaming media server, wherein the configuration information comprises a single file benchmark and a unique file benchmark for the at least one streaming media server;

Docket No.: 200313317-1

receiving, into said capacity planning tool, workload information for a workload of client accesses of streaming media files from a server; and said capacity planning tool evaluating, based on said configuration information, a capacity of the at least one streaming media server for supporting the workload. (Emphasis added).

Lumelsky fails to teach at least the above-emphasized elements of claim 1. In general, Lumelsky is directed to a system in which a plurality of servers are employed for serving content, and Lumelsky proposes a Service Control Plane (SCP) between the clients and server resources to provide control and management of the servers for serving content to the clients, see col. 5, lines 26-59 and col. 8, line 61 – col. 9, line 39, and FIGURES 4-5 of Lumelsky. Lumelsky explains its SCP as follows at col. 5, lines 36-59:

According to the principles of the invention, the service control plane is an intelligent intermediary decision plane for managing and enforcing end-to-end properties in the availability of end resources in a computer networked environment. The service control plane receives stimuli (i.e., application requests) from a plurality of clients desiring to access target multimedia content, for instance, and responds to these with end-to-end mapping recommendations satisfying one or more properties (policies) set in the service control plane. When a client accepts a mapping recommendation, the service control plane guarantees its performance as set forth by the policies used to generate it.

The SCP essentially provides the control and management of the serverside (end) resources which may be characterized as global, i.e., resources
dynamically (on-demand) allocated by the system and having a lifetime
determined by the system; and local, i.e., resources pre-allocated and presented to
the system as possessing a lifetime that is independent of the system. As in any
distributed object scheme, the local resource is a resource that is associated and
maintained by its originating private provider. A global resource represents an ondemand created resource that is made available at one or more global system
providers.

Lumelsky recognizes an issue that it attempts to address, as discussed at col. 8, lines 29-39 as follows:

It [sic: "if"] clients (123) and (124) desire to request content from the server (111) (via dotted lines 203 and 204, respectively) such requests may be declined, if the server (111) does not have enough of a specific resource, or a combination of resources. In the same time, server (113) and (114) may be temporary under used, having an additional resource to satisfy requests from clients (123) and (124), but owning no correspondent content. If this content is replicated from the server (111) to servers (113), and (114), then requesting clients (123) and (124) may be re-addressed to servers (113) or (and) (114).

Thus, Lumelsky recognizes that requests from clients may be satisfied by under-utilized ones of a plurality of servers if those servers possess the content for serving the client requests. Accordingly, Lumelsky proposes a SCP to intervene between a plurality of servers and clients in order to better manage the utilization of such servers in serving requests of the clients. For instance, Lumelsky explains at col. 8, line 64 – col. 9, line 14:

In order to provide means to intervene into this process, a Service Control Plane (SCP) middleware is provided such as shown in FIG. 4. The SCP (400) is located between the clients (121, ..., 124) and the server resources (111, ..., 114), interrupts client requests, finds their rate, density and proximity, determines what content is "hot" and predicts the distribution of the requests for such "hot" content. On the other hand, the SCP (400) monitors the availability of the resources, maps the requests to the servers with available resources, predicts utilization of the end-resources and if necessary, dynamically re-distributes the content. Because the SCP enables borrowing of under used resources from servers (113) and (114) for increasing the resources of the server (111), for example, the resources at the server 111 grow sufficiently and on-time to satisfy expeditiously all the requests to the content on this server. The SCP also enables returning resources back to the lending servers when the rate of requests decreases.

As such, Lumelsky is not directed to techniques for determining an optimal configuration of a media server for supporting the media server's expected workload, but is instead directed to a SCP that resides between a plurality of servers and clients for dynamically managing what content should be stored to which ones of the servers and for managing which client requests should be directed to which ones of the servers.

Docket No.: 200313317-1

Claim 1, as amended herein, recites that the configuration information received by the recited capacity planning tool comprises "a single file benchmark and a unique file benchmark for the at least one streaming media server". Lumelsky does not teach any such single file benchmark or unique file benchmark for a streaming media server. Claim 1 also recites that the capacity planning tool evaluates the capacity of the at least one streaming media server "based on said configuration information". Again, Lumelsky does not teach configuration information that comprises a single file benchmark and unique file benchmark, and thus Lumelsky fails to teach performing evaluation of capacity of a streaming media server based on such information.

As described in columns 9-14, *Lumelsky* proposes a management technique for mapping client requests to particular servers based on various policies, etc., which are configured by system administrators of the servers. For instance, at col. 12, line 65 – col. 13, line 10, *Lumelsky* explains:

A system administrator configures overall resources as local and global. The administrator is responsible for establishing the ratio of local to global resources for each server as well as to establishing policies of "green" "yellow" and "red" load limits for those resources. After configuring a partition as global storage, the global resource management takes over the control of this resource. Thus, a global storage bin represents a partition that can only be reserved by the global resource management provided by SCP. Note, that the system administrator or the server itself, depending on a relevant policy, may re-claim the global resource in full or partially, by requesting its release from the SCP management.

Thus, no use of a single file benchmark or unique file benchmark for a given server's configuration is mentioned in *Lumelsky*, but rather the system administrator is left to configure the policies for use by the SCP in governing the resources.

In view of the above, Lumelsky fails to teach all elements of claim 1, and therefore fails to anticipate claim 1. As such, the outstanding rejection of claim 1 should be withdrawn.

# Independent Claim 16

Independent claim 16, as amended herein, recites:

Computer-executable software code stored to a computer-readable medium, the computer-executable software code comprising: code for receiving workload information for a workload of client accesses of streaming media files from a server; and

<u>code</u> for employing a <u>cost</u> function derived for at least one <u>system</u> <u>configuration</u> from a <u>single</u> file benchmark and a unique file benchmark for <u>evaluating</u> a <u>capacity</u> of the at least one <u>system</u> <u>configuration</u> for <u>supporting</u> the <u>workload</u>. (Emphasis added).

Lumelsky fails to teach at least the above-emphasized element of claim 16. That is, Lumelsky does not teach employing a cost function that is derived for at least one system configuration from a single file benchmark and a unique file benchmark for evaluating capacity of the at least one system configuration. As discussed above with claim 1, Lumelsky fails to teach any such single file benchmark and unique file benchmark. Thus, Lumelsky fails to teach all elements of claim 16, and therefore fails to anticipate claim 16. As such, the outstanding rejection of claim 16 should be withdrawn.

#### Independent Claim 25

Independent claim 25, as amended herein, recites:

A system comprising:

means for receiving configuration information for a plurality of different system configurations, wherein the configuration information comprises, for each of the plurality of different system configurations, a corresponding single file benchmark and unique file benchmark, wherein said single file benchmark measures capacity of the corresponding system configuration for serving a population of clients that all access a same file, wherein said unique file benchmark measures capacity of the corresponding system configuration for serving a population of clients that all access different files;

means for receiving workload information for a workload of client accesses of streaming media files from a server; and means for evaluating, based on the configuration information, the capacity of each of said plurality of different system configurations for supporting said workload. (Emphasis added).

Lumelsky fails to teach at least the above-emphasized elements of claim 25. As discussed above with claim 1, Lumelsky fails to teach a single file benchmark and unique file benchmark, such as those recited in claim 25. Further, Lumelsky does not teach a means for evaluating capacity of a plurality of different system configurations based on such configuration information that comprises the single file and unique file benchmarks. Thus, Lumelsky fails to teach all elements of claim 25, and therefore fails to anticipate claim 25. As such, the outstanding rejection of claim 25 should be withdrawn.

## Independent Claim 28

Independent claim 28, as amended herein, recites:

### A method comprising:

receiving workload information identifying an expected workload of client accesses of streaming media files from a server over a period of time; and determining a service demand profile for at least one server configuration under evaluation for evaluating a capacity of said at least one server configuration for supporting the expected workload, wherein said service demand profile comprises a plurality of pairs of information, each pair comprising an identification of a duration of time in said period of time and a corresponding computed resource cost of the at least one server configuration for serving the workload over the duration of time. (Emphasis added).

Lumelsky fails to teach at least the above-emphasized element of claim 28. That is, Lumelsky fails to teach a service demand provide that comprises a plurality of pairs of information such as that recited in claim 28. Thus, Lumelsky fails to teach all elements of claim 28, and therefore fails to anticipate claim 28. As such, the outstanding rejection of claim 28 should be withdrawn.

#### Dependent Claims

Dependent claims 2-9, 11-15, 26-27, and 29-31 each depend either directly or indirectly from one of independent claims 1, 25, and 28 and, thus, inherit all of the limitations of their respective independent claims. It is respectfully submitted that dependent claims 2-9, 11-15, 26-27, and 29-31 are allowable at least because of their dependence from their respective base claims for the reasons discussed herein. Accordingly, Applicant respectfully requests the withdrawal of the rejection of claims 2-9, 11-15, 26-27, and 29-31.

# V. Rejection under 35 U.S.C. § 103(a) over Lumelsky

Claims 16-24 are rejected under 35 U.S.C. §103(a) as being unpatentable over *Lumelsky*. Independent claim 16, as amended herein, recites:

Computer-executable software code stored to a computer-readable medium, the computer-executable software code comprising:

code for receiving workload information for a workload of client accessed.

code for receiving workload information for a workload of client accesses of streaming media files from a server; and

<u>code for employing a cost function derived for at least one system configuration from a single file benchmark and a unique file benchmark for evaluating a capacity of the at least one system configuration for supporting the workload.</u> (Emphasis added).

As discussed above with claim 1, Lumelsky fails to teach a single file benchmark and unique file benchmark, and thus fails to teach or suggest employing a cost function derived from such single file and unique file benchmarks, as recited in claim 16. Thus, Lumelsky fails to teach or suggest all elements of claim 16, and therefore the outstanding rejection of claim 16 should be withdrawn.

Dependent claims 17-24 each depend either directly or indirectly from independent claim 16 and, thus, inherit all of the limitations thereof. It is respectfully submitted that dependent claims 17-24 are allowable at least because of their dependence from claim 16 for the reasons discussed above. Accordingly, Applicant respectfully requests the withdrawal of the rejection of claims 17-24.

#### VI. Rejection under 35 U.S.C. § 103(a) over Lumelsky in view of Drees

Claim 10 is rejected under 35 U.S.C. §103(a) as being unpatentable over *Lumelsky* in view of *Drees*. Applicant respectfully traverses for the reasons stated below.

It is well settled that "[t]he examiner bears the initial burden of factually supporting any prima facie case of obviousness. If the examiner does not produce a prima facie case, the applicant is under no obligation to submit evidence of nonobviousness." MPEP § 2142. To make a prima facie case of obviousness, the Examiner must determine the "scope and content of the prior art," ascertain the "differences between the prior art and the claims at issue," determine "the level of ordinary skill in the pertinent art," and evaluate evidence of secondary considerations. Graham v. John Deere, 383 U.S. 1, 17, (1966); KSR Int'l Co. v. Teleflex Inc., 550 U.S. (2007); see also M.P.E.P. § 2141. When determining the differences between the prior art and the claims, the question under 35 U.S.C. 103 is not whether the differences themselves would have been obvious, but whether the claimed invention as a whole would have been obvious. M.P.E.P. § 2141.02(f).

The Supreme Court in KSR stated that it is "important [for an examiner] to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the [prior art] elements" in the manner claimed. KSR Int'l Co. v. Teleflex, Inc., No. 04-1350, slip op. at 14 (U.S. April 30, 2007). Indeed, the Court indicated that there should be an "explicit" analysis regarding "whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue." Id. (emphasis added). Further, the Court did not totally reject the use of "teaching, suggestion, or motivation" test as a factor in the obviousness analysis. Id. at 14-15.

#### A. No Apparent Reason to Combine

Applicant respectfully asserts there is no apparent reason why a person of ordinary skill in the art would combine *Lumelsky* with *Drees*. Applicant respectfully asserts that *Lumelsky* and *Drees* are non-analogous art that are directed to much different systems/problems, and as such one of ordinary skill in the art would not have been led to combine the references in the manner

applied by the Examiner. Lumelsky is directed to "a system and method for managing multimedia content and server-side resources that exploits the unique characteristics of future computer networked environments." Col. 5, lines 12-15 of Lumelsky. On the other hand, Drees is directed to "thermal storage systems and more particularly to a controller and method for controlling a thermal storage system." Col. 1, lines 5-7 of Drees. Drees explains that a thermal storage system "consists of a storage media integrated into a chilled water or brine cooling system", and a "control system provides for charging and discharging the thermal storage system." Col. 1, lines 50-53 of Drees. Drees proposes a controller that implements heuristics for controlling the charging and discharging of a thermal storage system in order to minimize energy costs, see col. 3, lines 15-27 of Drees.

There is no apparent reason why one of ordinary skill in the art would have been led to attempt to combine the thermal storage system controller of *Drees* with the multimedia content server management techniques of *Lumelsky*. Indeed, it is unclear what rationale the Examiner advances regarding why one of ordinary skill in the art would have made such a combination. The Office Action discusses on page 12 that *Drees'* calculation could be used for a building with multiple apartment units, and that on-peak and off-peak usage rates for the apartments could be used along with the pricing for such usage rates to determine a "demand" for the thermal control services. However, even if this purported usage of *Drees* is accurate, it provides no reasoning whatsoever why one of ordinary skill in the art would combine *Drees* thermal storage system controller with the multimedia content server management techniques of *Lumelsky*. Thus, the Examiner has failed to establish a proper prima facie case of obviousness, and Applicant maintains that such a prima facie case cannot be properly made because no apparent reason exists for combining the disparate teachings of *Lumelsky* and *Drees*.

Moreover, claim 10 expressly recites an equation for computing demand, which includes certain variables corresponding to such elements as a workload "W" that comprises  $X_{w} = X_{1}, \dots, X_{k_{W}} \text{ set of different encoded bit rates of files served in the workload, } N_{X_{y_{i}}}^{\text{memory}} \text{ is a number of streams in the workload having a memory access to a subset of files encoded at } N_{y_{i}} \text{ Kb/s, } Cost_{X_{y_{i}}}^{\text{memory}} \text{ is a cost of consumed resources for a stream having a memory access to a subset of files encoded at } N_{y_{i}} \text{ Kb/s, } Cost_{X_{y_{i}}}^{\text{memory}} \text{ is a cost of consumed resources for a stream having a memory access to a subset of files encoded at } N_{y_{i}} \text{ Kb/s, } Cost_{X_{y_{i}}}^{\text{memory}} \text{ is a cost of consumed resources for a stream having a memory access to a subset of files encoded at } N_{y_{i}} \text{ the subset of consumed resources for a stream having a memory access to a subset of files encoded at } N_{y_{i}} \text{ the subset of consumed resources for a stream having a memory access to a subset of files encoded at } N_{y_{i}} \text{ the subset of consumed resources for a stream having a memory access to a subset of files encoded at } N_{y_{i}} \text{ the subset of consumed resources for a stream having a memory access to a subset of files encoded at } N_{y_{i}} \text{ the subset of consumed resources for a stream having a memory access to a subset of files encoded at } N_{y_{i}} \text{ the subset of consumed resources for a stream having a memory access to a subset of files encoded at } N_{y_{i}} \text{ the subset of consumed resources for a stream having a memory access to a subset of files encoded at } N_{y_{i}} \text{ the subset of consumed resources for a stream having a memory access to a subset of files encoded at } N_{y_{i}} \text{ the subset of consumed resources for a stream having a memory access to a subset of files encoded at } N_{y_{i}} \text{ the subset of consumed resources for a stream having a memory access to a subset of files encoded at } N_{y_{i}} \text{ the subset o$ 

Docket No.: 200313317-1

file encoded at  $X_{W_i}$  Kb/s,  $N_{X_{w_i}}^{disk}$  is a number of streams in the workload having a disk access to a subset of files encoded at  $X_{w_i}$  Kb/s, , and  $cost_{X_{w_i}}^{dink}$  is a cost of consumed resources for a stream having a disk access to a file encoded at  $X_{W_i}$  Kb/s. The Examiner appears to contend that it would have been apparent to one of ordinary skill in the art to modify the on-peak and off-peak energy usage rates of the thermal storage system of Drees to form the recited memory costs and disk costs of the equation of claim 10. There is no apparent reason why one of ordinary skill in the art would have been led to make such a drastic departure from the actual teaching of Drees to somehow modify its energy usage rates for a thermal storage system to form an equation that computes demand of a media server based on memory access costs and disk access costs as recited by claim 10. Accordingly, the rejection should be withdrawn for this further reason.

#### B. Lack of All Claimed Elements

As discussed above, claim 10 is rewritten in independent form herein. Claim 10 recites in part:

wherein said computing said service demand comprises computing:

$$Demand = \sum_{i=1}^{K_W} N_{X_{W_i}}^{memory} \times cost_{X_{W_i}}^{memory} + \sum_{i=1}^{K_W} N_{X_{W_i}}^{disk} \times cost_{X_{W_i}}^{disk},$$
 wherein the workload W comprises  $X_w = X_1, \dots, X_{K_W}$  set of different

encoded bit rates of files served in the workload,  $N_{\chi_{w}}^{memory}$  is a number of streams in the workload having a memory access to a subset of files encoded at  $X_{w_i}$  Kb/s,  $cost_{X_{\mathcal{U}}}^{memory}$  is a cost of consumed resources for a stream having a memory access to a file encoded at  $X_{W_i}$  Kb/s,  $N_{X_w}^{disk}$  is a number of streams in the workload having a disk access to a subset of files encoded at  $X_{W_i}$  Kb/s, , and  $cost_{X_w}^{disk}$  is a cost of consumed resources for a stream having a disk access to a file encoded at  $X_{W}$  Kb/s.

The Office Action concedes that Lumelsky fails to teach or suggest the above element. However, the Office Action contends that Drees teaches this element. Applicant respectfully

disagrees. The Examiner appears to contend that the on-peak and off-peak energy usage rates of the thermal storage system of *Drees* somehow teach the above-recited memory costs and disk costs of the equation of claim 10. This is simply not true. One of ordinary skill in the art would readily recognize that the on-peak and off-peak energy usage rates of *Drees* do not, in any way, correspond to memory consumption and disk consumption costs to a media server in serving streams of a workload. Accordingly, the rejection should be withdrawn for this further reason.

### VII. Rejection under 35 U.S.C. § 103(a) over Lumelsky in view of Chen

Claim 36 is rejected under 35 U.S.C. §103(a) as being unpatentable over *Lumelsky* in view of *Chen*. As discussed above, claim 32 is amended herein to effectively rewrite claim 36 in independent form as claim 32. As such, the rejection of claim 36 is addressed below with regard to claim 32.

#### Independent Claim 32

Independent claim 32, as amended herein, recites:

A system comprising:

a media profiler operable to receive a client access log collected over a period of time for a service provider's site and generate a workload profile for the service provider's site, wherein said workload profile comprises, for a plurality of different points in time, identification of a number of concurrent client accesses, wherein the number of concurrent client accesses are categorized into corresponding encoding bit rates of streaming media files accessed thereby and are further sub-categorized into either memory or disk accesses; and

a capacity evaluator operable to receive the generated workload profile and evaluate at least one server configuration's capacity for supporting the site's workload. (Emphasis added).

The Examiner asserts that Lumelsky teaches generating a workload profile for a service provider's site that comprises "for a plurality of different points in time, identification of a number of concurrent client accesses, wherein the number of concurrent client accesses are categorized into corresponding encoding bit rates of streaming media files accessed thereby", see page 12 of the Office Action. The Office Action cites to col. 8, lines 66-67, col. 9, lines 1-8, 45-50, and 58-64, and col. 10, lines 45-53 of Lumelsky as teaching the above element of claim 32.

However, the cited portions of *Lumelsky* make no mention whatsoever of identifying for a plurality of different points in time a number of concurrent client accesses that are categorized into corresponding encoding bit rates of streaming media files accessed thereby. Additionally, Applicant has found no other teaching in *Lumelsky* of such a workload profile for a service provider's site.

Further, the Office Action concedes that Lumelsky fails to teach or suggest that the identified number of concurrent client accesses are "further sub-categorized into either memory or disk accesses", as recited by claim 32. The Office Action asserts that Chen teaches this element, see page 13 of the Office Action. However, the cited portion of Chen does not teach or suggest sub-categorizing such an identified number of concurrent client accesses of a service provider's site into either memory or disk accesses. Rather, the portion of Chen on which the Office Action relies (col. 6, lines 25-29) discuss that certain objects transmitted from a server to a caching device may be categorized as either cacheable or non-cacheable. Non-cacheable objects include confidential and time-sensitive web objects, see col. 6, lines 29-30. Whether an object is categorized as either cacheable or non-cacheable does not equate to a categorization of whether an identified number of concurrent client accesses of a service provider's site are memory or disk accesses. Even if cacheable objects are accessed in Chen, they are not necessarily memory accesses (i.e., merely because an object is "cacheable" does not mean that it has been cached and is a memory access when being served to a client). Thus, for at least this reason the rejection of claim 32 should be withdrawn.

Dependent claims 33-35 and 37 each depend either directly or indirectly from independent claim 32 and, thus, inherit all of the limitations thereof. It is respectfully submitted that dependent claims 33-35 and 37 are allowable at least because of their dependence from claim 32 for the reasons discussed above. Accordingly, Applicant respectfully requests the withdrawal of the rejection of claims 33-35 and 37.

#### VIII. New Claims

New claims 38-44 are added herein.

Claims 38-39 depend from claim 1 and are thus believed to be allowable for at least the reasons discussed above for claim 1.

Claims 40-41 depend from claim 25 and are thus believed to be allowable for at least the reasons discussed above for claim 25.

Claim 42 depends from claim 28, and is thus believed to be allowable for at least the reasons discussed above for claim 28.

Claim 43 depends from claim 37, which depends from claim 32, and thus claim 43 is believed to be allowable for at least the reasons discussed above for claim 32.

Independent claim 44 recites, in part, "determining results of a single file benchmark for each of a plurality of encoding bit rates of a single file served by at least a first streaming media server configuration, wherein the result of the single file benchmark for a given encoding bit rate identifies the maximum number of concurrent streams of the single file that the at least a first streaming media server configuration can supply to a population of clients at the given encoding bit rate" and "determining results of a unique file benchmark for each of said plurality of encoding bit rates, wherein the result of the unique file benchmark for a given encoding bit rate identifies the maximum number of concurrent streams of different files that the at least a first streaming media server configuration can supply to the population of clients at the given encoding bit rate". Applicant respectfully submits that the applied art fails to teach or suggest at least the above elements of claim 44

#### IX. Conclusion

In view of the above, Applicant believes the pending application is in condition for allowance.

Applicant believes a fee of \$770.00 for 2 additional independent claims is due with this response. However, if a fee is due, please charge our Deposit Account No. 08-2025, under Order No. 200313317-1 from which the undersigned is authorized to draw.

I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being transmitted via the Office electronic filing system in accordance with § 1.6(a)(4).

Dated: October 15, 2007

Signature: Monus House (Donna Forbit) Respectfully submitted,

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